



Draft Updated Forest Protocol Public Workshop

December 5, 2008

Brief Background of CCAR



- Non-profit organization established by California legislation
- Regulatory quality GHG accounting standards
- Recognition for early voluntary action

Project Reductions – CCAR Approach



- standardized, performance-based
- accurate, conservative (minimize uncertainty)
- public, stakeholder-driven development process
- Climate Action Reserve
 - Strong Standards
 - Independent third-party verification
 - Public Registration (serialization, tracking)

Forest Protocol Adoption and Update



- Adopted by CCAR in 2005; adopted by ARB in 2007
- Recognize importance of forestry to achieve climate mitigation goals
- Three project types (reforestation, conservation management, avoided deforestation)
- Two projects verified, more on the way

Updating Process



- ARB sought broader application:
 - private commercial forests not associated with a land trust
 - private non-timber forests (oak woodlands)
 - public lands

Updating Process



- CCAR sought improvements
 - Update science
 - Better address leakage, permanence, baseline
 - Improve guidance for calculations
 - Cost-effective methods
 - Use outside CA

Forest Protocol Workgroup



- Group size chosen to foster dialogue and be effective
- Have met at least every 3 weeks since November 2007, in all-day sessions
- CCAR managed process
- Comprised of:
 - Private landowners, large and small
 - Public landowners
 - Environmental organizations
 - Scientists/Academics
 - Regulators
 - Verifiers

Forest Issues Addressed in Update



- Maintain core principles:
 - Real, Permanent, Additional, Verifiable, and Enforceable
- Baseline and additionality
- Risk-management: permanence and leakage
- Quantification
- Co-benefits

Sub-committee Leads



The workgroup operated through sub-committees .

- Improved Forest Management Baseline – Eric Holst, EDF
- Public Lands Forest Management Baseline – Bruce Goines, USFS
- Reforestation Baseline – Doug Wickizer, CAL FIRE
- Avoided Conversion Baseline – Michelle Passero, TNC
- Permanence – Ed Murphy, SPI
- Leakage – Katie Goslee, Winrock
- Co-Benefits – Robert Hrubes, SCS
- Quantification – Tim Robards, CAL FIRE

Baseline and Additionality



- Improved Private Lands Forest Management Baseline
- Current: Forest Practice Rules, Option C
- Proposed: A modeled baseline approach based on legal and financial constraints projected over 100 years, then averaged, with regional FIA data as a governor. An historic review of stocks disallows a baseline scenario that follows a period of rapid depletion.

Baseline and Additionality



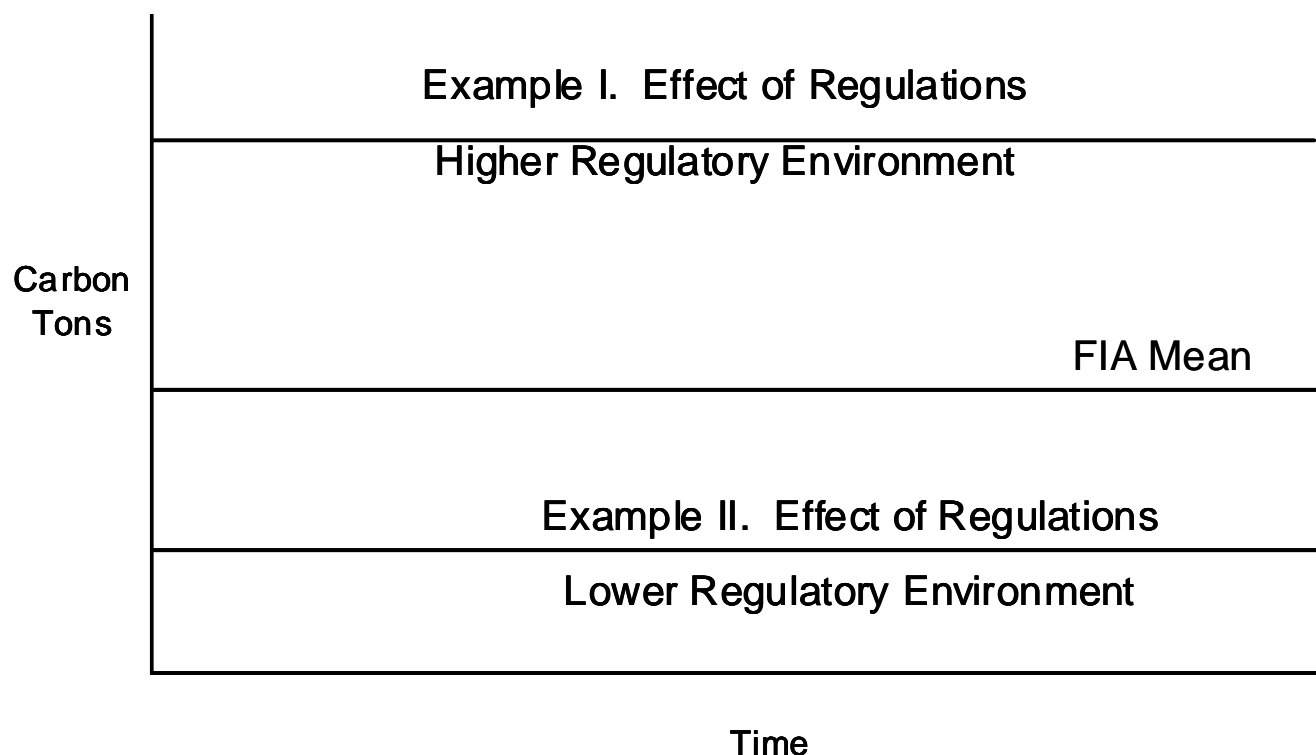
Carbon
Tons

FIA Average

Time

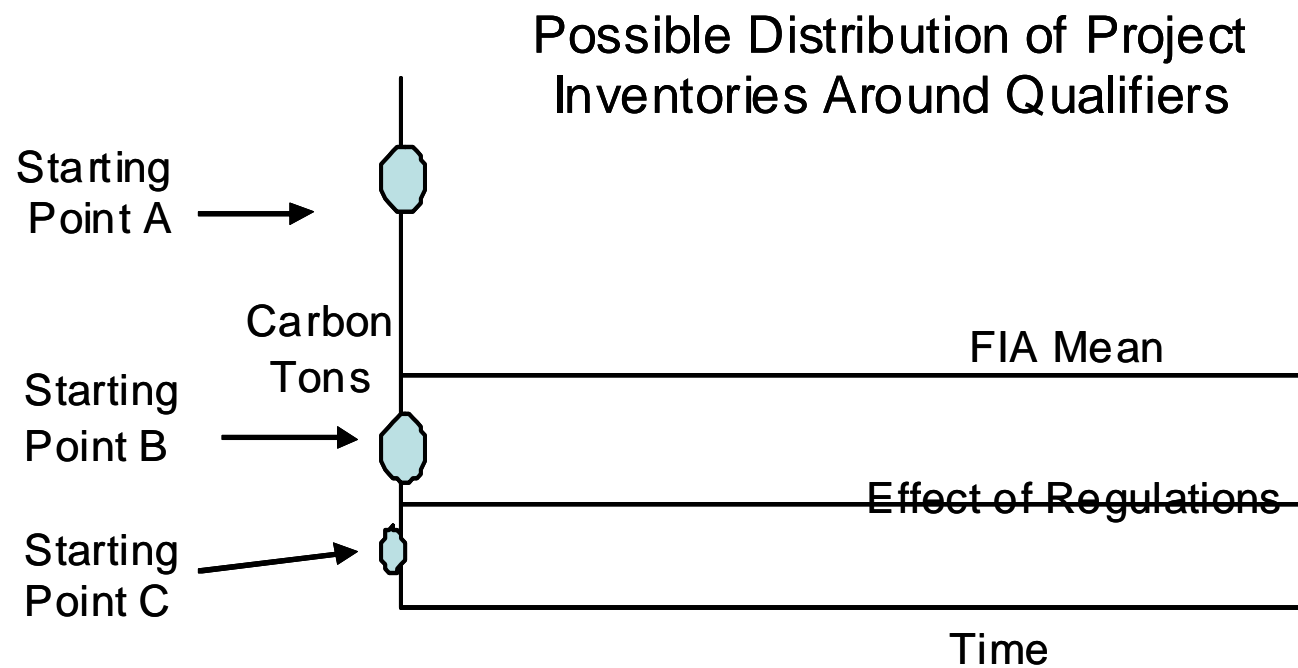
FIA average (mean) is used as a governor to determine projects that are identified as possible able to identify avoided emissions.

Baseline and Additionality



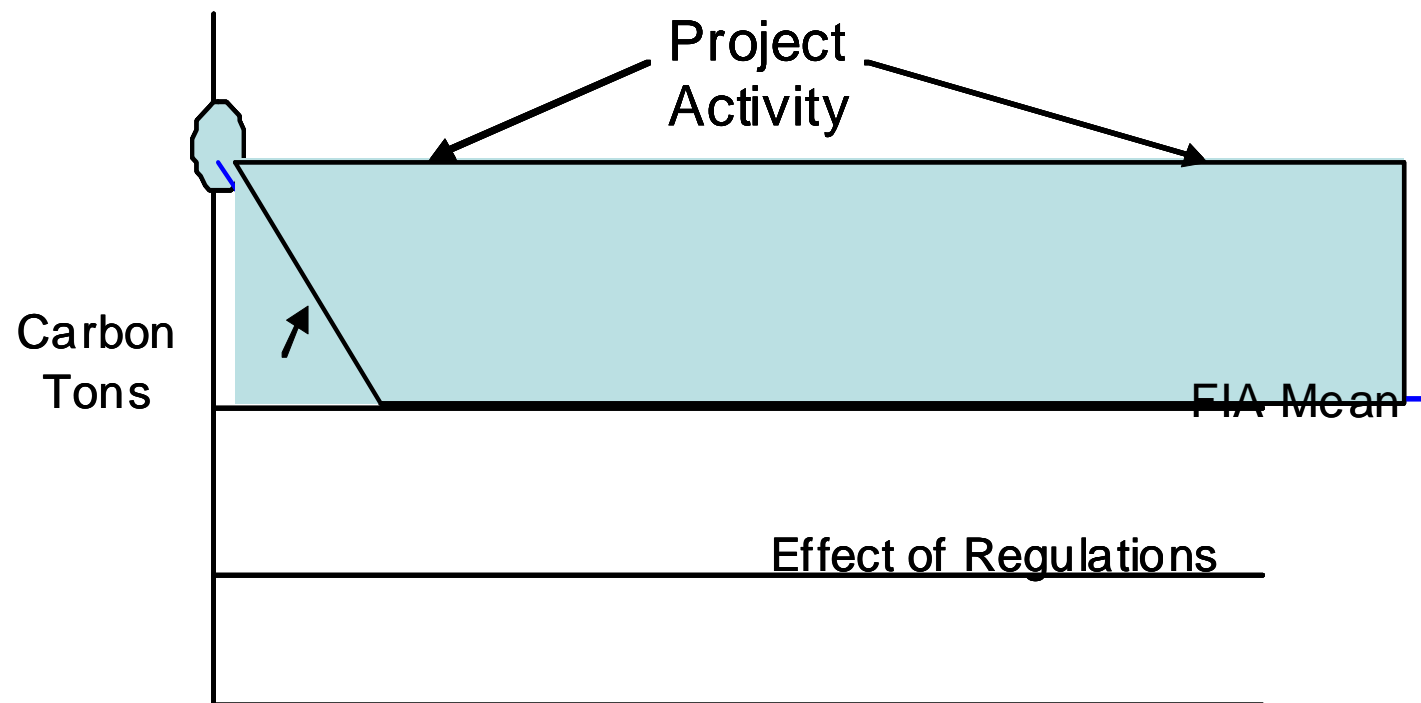
The baseline determination includes an analysis of the regulatory context

Baseline and Additionality



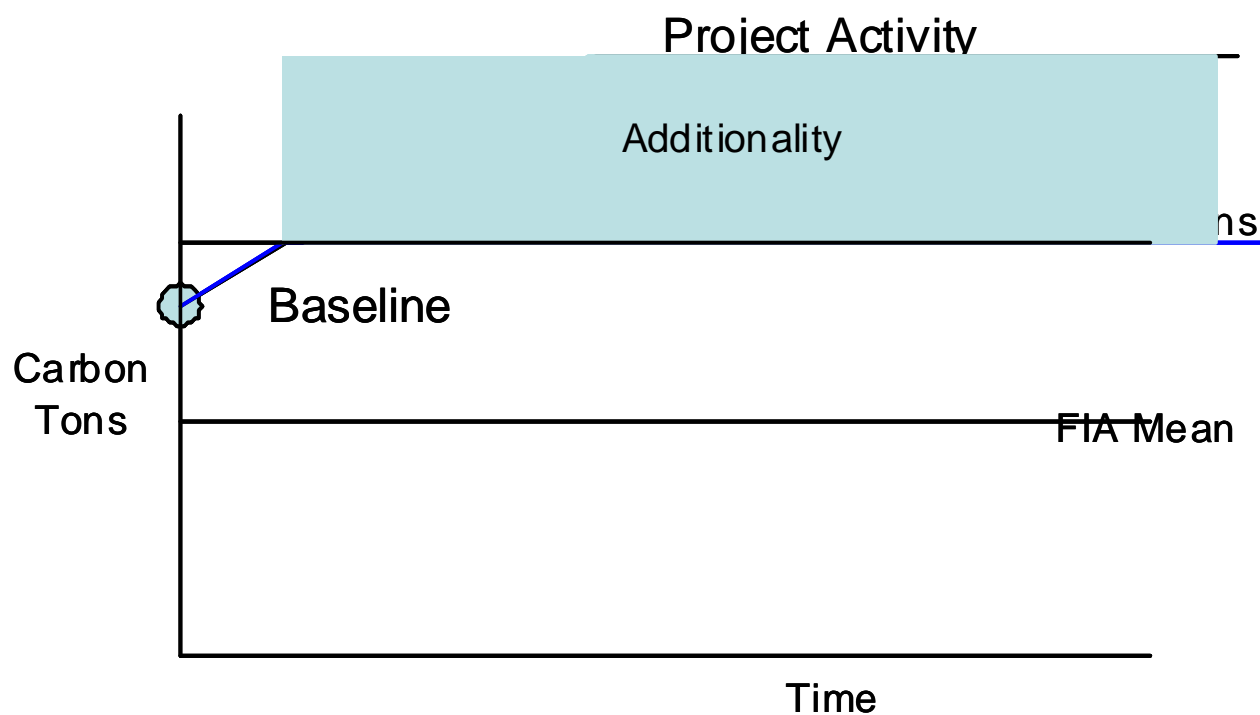
The baseline is mostly determined by the relationship of starting stocks to the FIA mean and the regulatory context

Baseline and Additionality



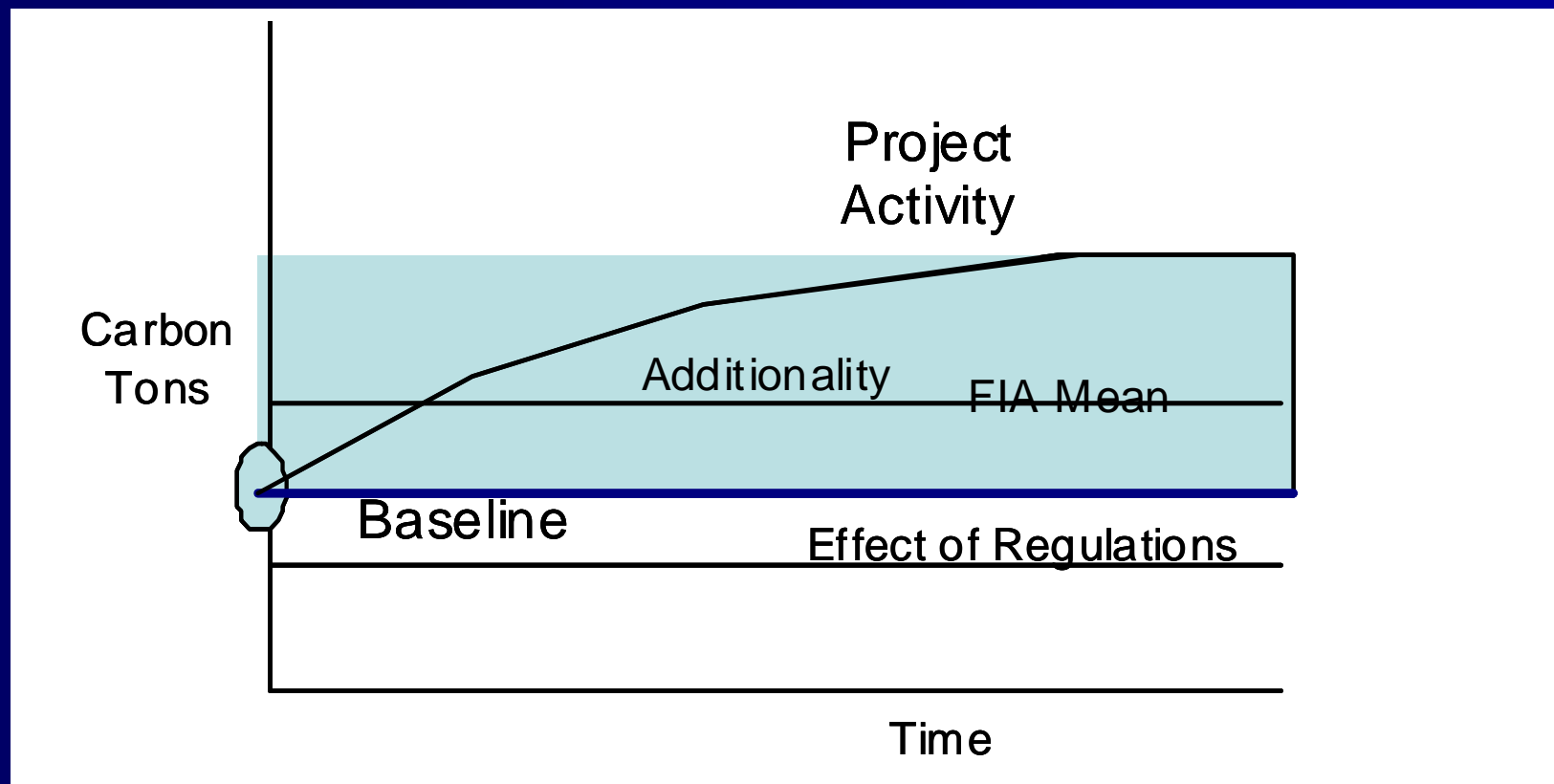
Baseline for a project starting above the FIA mean and regulatory context is demonstrated by a modeled harvest scenario down to the FIA mean and/or regulatory context 14

Baseline and Additionality



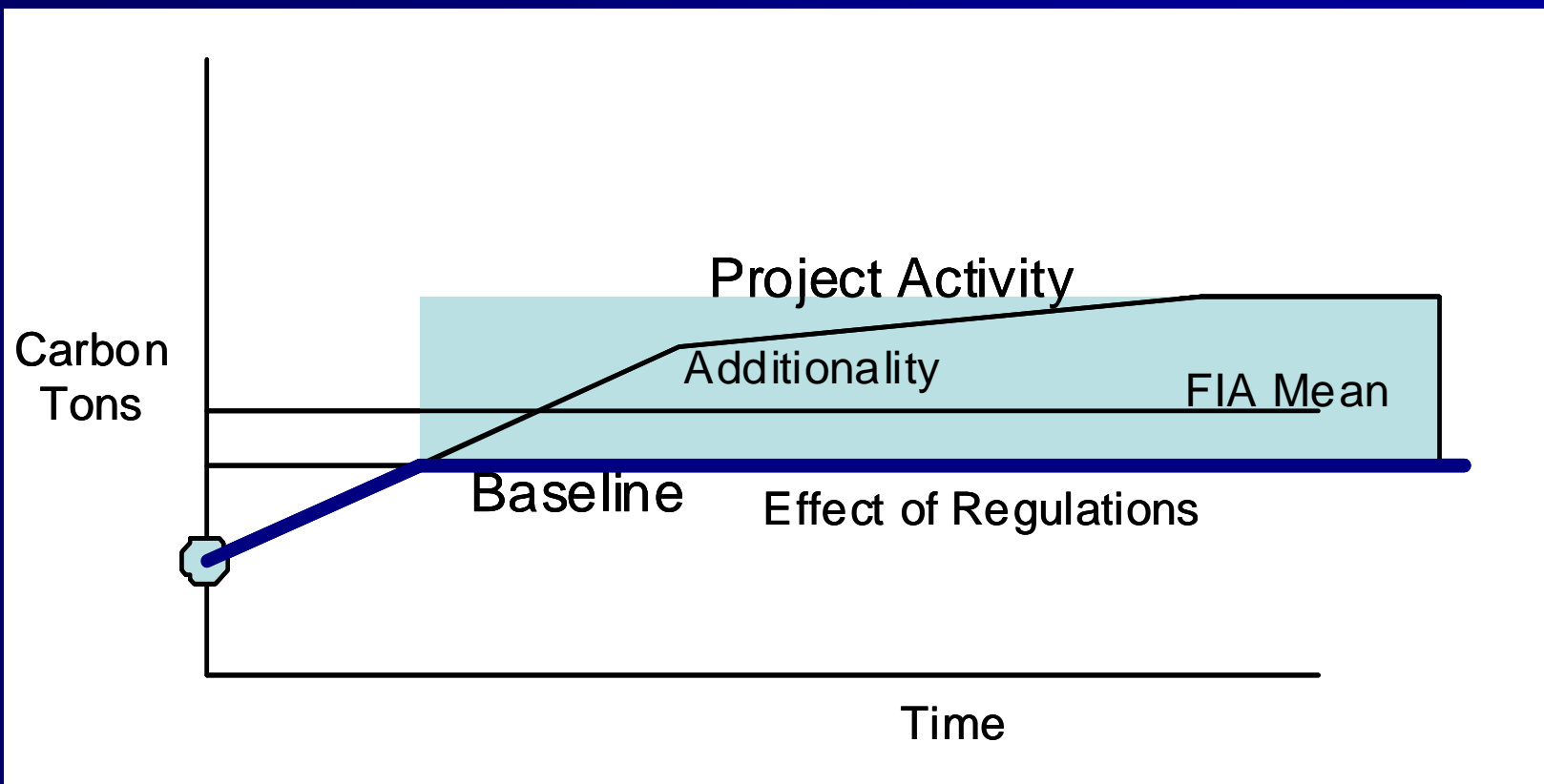
All project baselines must meet the regulatory context

Baseline and Additionality



Projects below the FIA Mean are not able to get credit for avoided emissions

Baseline and Additionality



All projects must meet the regulatory context

Baseline and Additionality



Additional analysis must be conducted to demonstrate:

- Financial feasibility
- Historic management (past 10 years) has been a period of rapid depletion.

Improved Reforestation Baseline



- Current: out of forest cover for 10 years and on forest soils
- Added clause that enables reforestation projects after significant natural disturbance

Improved Baseline for Avoided Conversion



- Current – Site specific immediate threat
- Added discounted risk-based approach based on risk of conversion in each of the following categories:
 - Suitability of Project Area for Conversion
 - Legal Permissibility of Conversion
 - Disparity in Value
 - Assessment of Risk of Conversion

New Public Lands Forest Management Baseline



- A new baseline approach that allows public lands to quantify a baseline based on an historic (10-year) review of retention standards, rotations, and other practices determined by statute, regulation, policy, and budgets

Risk-management



- Greenhouse gas reduction projects face a variety of risks that may compromise the reductions produced by a project.
- The *permanence* of reductions and *leakage* (i.e., displacement of GHG emissions) are among the risks that forest projects may encounter.

Risk-management: permanence



- CCAR defines permanence as securing any obligated reductions from the inception of those reductions for a period of 100 years (an international standard used to represent the life-cycle of carbon in the atmosphere)

Risk-management: permanence



- Three permanence mechanisms in updated forest protocol
 - Requirement for annual self monitoring and reporting, and periodic inventory verification.
 - Requirement that the project be governed by a contractual agreement between the project proponent and CCAR that is recorded and commits parties to the terms of the project and verification protocol.
 - Requirement that the project include a risk assessment and establishment of reserves (a buffer pool) based upon this risk assessment.

Risk-management: permanence



- Risk Assessment
 - Natural disturbances: fire, disease
 - Illegal activity
 - Ownership change
 - Financial
- Buffer Pool
 - Contribution based on risk
 - Used to backfill reversals
 - CCAR manage, or private insurance
 - Consistent with VCS

Risk-management: leakage



- The former “Forest Sector” protocol has been replaced by a rigorous leakage risk assessment
- Each project type has its own worksheet that assesses the risk of leakage and provides a corresponding leakage risk factor
- This risk factor or leakage percent must be assessed annually and deducted from the calculations of net carbon sequestration or avoided emissions

Co-benefits



- Improved definitions of “native” and “natural forest management”.
- Native species requirement
- Requires management of biodiversity at watershed-scale regardless of silvicultural methods used.

Quantification



- Improvements in both accuracy and cost-effectiveness.
- The latest biomass equations are incorporated.
- All carbon pools, including wood products, will be required unless the project developer can demonstrate their inclusion yields minimal benefits to calculating emissions or that their exclusion results in a more conservative estimate of reductions.
- Wood products are still under active discussion and will be vetted in a public workshop early 28 2009.

Oak Woodlands



- Protocols as they exist are appropriate for oak woodlands
- Oak woodlands should incorporate the baseline approach for private lands forest management

Verification Protocol



- Drafted after Forest Project protocol goes through public review
- Goes to CCAR Board with the final Forest Project protocol

Timeline



- We are now in a 45-day public comment period for the updated Forest Project protocol. Comments are due by January 19, 2009. Comments can be provided online at: <http://www.climateregistry.org/tools/protocols/project-protocols/forests.html>
- Public workshop on wood products quantification on January 20, 2009.
- Additional 30-day public comment period to address wood products concludes on February 20, 2009.
- Final draft delivered to CCAR on March 8, 2009
- Final Forest Project protocol to CCAR Board and ARB Board in April 2009

Contact



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<http://www.climateretry.org/tools/protocols/project-protocols/forests.html>